HEWLETT-PACKARD COMPANY
Legal Department, IPA Section, ms: 35
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Fort Collins, CO 80528-9599

PATENT APPLICATION

Attorney Docket No: 10007237-1

Remarks/Arguments

Applicants thank the Examiner for careful consideration of the application.

Please amend claims 1, 2, 4, 15, 21, 23-24, 36-37, and 44.

No claims have been allowed by the Examiner.

I. Drawing Objections:

Examiner, on page 3 of the Office Communication, has objected to the drawings for failing to mention every reference character in the description of the invention under 37 C.F.R §1.84(p)(5). In particular, Examiner noted that Applicants in previous response indicated that Applicants had removed the numeral and lead line, for 768', in Fig. 7, in response to Examiner's previous objection to the drawings. Applicants thank Examiner for finding this omission. In response Applicants have removed reference numeral 768' and its associated lead line. Applicants have submitted a new formal drawing along with this response incorporating the above noted change.

Applicants believe that this change does not introduce new matter into the specification. Each drawing sheet includes all of the figures appearing in the immediate prior version of the sheet in compliance with 37 C.F.R 1.121(b), and includes the wording "Replacement Sheet" in the top margin in compliance with 37 C.F.R 1.121(d). Accordingly, Applicants believe that the Examiner's objection to the drawings has been overcome. Therefore, Applicants respectfully request that the Examiner withdraw the objection based on 37 C.F.R §1.84(p)(4) and (5).

II. Rejections under 35 U.S.C. §101:

Examiner, on page 5 of the Office Communication, has rejected claims 1-15 as being directed to non-statutory subject matter under 35 U.S.C. §101.

In particular, Examiner has rejected claims 1-15 as being directed merely to an arrangement of data, although stored in a processor readable medium. Examiner states

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that an "arrangement of data is non-functional descriptive material, which is not statutory subject matter even if stored in a computer-readable medium," citing MPEP §2106IV.B.1 and IV.B.1(b). In response, Applicants note the Supreme Court has held, Congress chose the expansive language of 35 U.S.C. §101 so as to include "anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 308009, 206 USPQ 193, 197 (1980). Applicants note that descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material," as stated in MPEP §2106 IV.B.1. The MPEP goes on to note that "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since the use of technology permits the function of the descriptive material to be realized. In MPEP §2106 IV.B.1(b) states that descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process, machine, manufacture or composition of matter.

Where certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data are merely stored so as to be read or outputted by a computer without creating any functional interrelationship either as part of the stored data or as part of the computing processes performed by the computer then such descriptive material alone does not impart functionality either to the data as so structured or to the computer. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. §101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, in the MPEP it is noted that a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, cases another defined series of notes to be played, defines a functional interrelationship among the data and the computing process performed when utilizing that data and as such is statutory because it

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implements a statutory process. Applicants agree with Examiner that a preexisting digital file having independent value to a provider alone is possibly nonfunctional descriptive material which may not by itself be patentable. However, Applicants believe that amended independent claim 1 claiming a preexisting digital file having independent value to a provider, a digital string provided by a purchaser to a provider system where the digital string has latent value at least to the purchaser along with the limitations of the digital string embedded two or more times in the preexisting digital file by the provider system, to form an embedded digital file, wherein the digital string is embedded at least once in a hidden manner forming a hidden digital string before the valued content is conveyed to the purchaser is directed to statutory subject matter that falls within 35 U.S.C. §101. In particular, Applicants assert that amended independent claim 1 includes nonfunctional descriptive material in combination with functional descriptive material that defines a functional interrelationship both as part of the stored data and as part of the computing processes performed by the computer that provides the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. §101. Accordingly, Applicants believe that the Examiner's rejection of claims 1-15 has been overcome. Therefore, Applicants respectfully request that the Examiner withdraw the rejection of claims 1-15 based on 35 U.S.C. §101.

III. Rejections under 35 U.S.C. § 112

Examiner, on page 6 of the Office Communication, has rejected claims 44-46 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, Examiner rejected claim 44 as having insufficient antecedent basis for the limitation "said purchaser." In amended independent claim 44 Applicants have amended "said purchaser" to --a purchaser--. Accordingly, Applicants believe that the Examiner's rejection of claim 44 has been overcome. Therefore, Applicants respectfully request that the Examiner withdraw the rejection of claims 44-46 based on 35 U.S.C. §112.

IV. Rejections under 35 U.S.C. §103(a):

Examiner has rejected claims 1-15, 21-35, and 37-44 under 35 U.S.C. §103(a) as being unpatentable over Wiser et al. (U.S. Patent No. 6,385,596, "Wiser") in view of Fujiwara (U.S. Patent Application Pub. 2001/0054081. This rejection is respectfully traversed with regard to claims 1-15, 21-35, and 37-44 since neither Wiser nor Fujiwara, taken either individually, or in combination therewith, teach, suggest, or mention the claimed invention.

To establish a prima facie case of obviousness, three basic criteria must be met. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, i.e. the prior art must suggest the desirability of the claimed invention. There must be a reasonable expectation of success. Finally all claim limitations must be taught or suggested by the prior art. MPEP §2143. These requirements are not met here.

Independent claim 1 discloses "a processor readable medium having a valued content in a digital form, organized to contain: a preexisting digital file having independent value to a provider; and a digital string provided by a purchaser to a provider system of said preexisting digital file, said digital string having a latent value at least to said purchaser, *said digital string embedded two or more times in said preexisting digital file* by said provider system, to form an embedded digital file, before the valued content is conveyed to said purchaser, wherein *said digital string is embedded at least once in a hidden manner forming a hidden digital string*," as it is disclosed, defined, and claimed, in amended independent claim 1 by Applicants in the instant specification. *Emphasis added.* In contrast, Wiser discloses separating "the management and administration of the purchase of the media content from the delivery of that media content to purchasers." Col. 6, lines 29-31. In addition, Wiser further discloses,

> "three distinct data objects are used to encapsulate the information used in various stages of the various transactions. Media content is stored in media data files that are encrypted, when purchased, using encryption keys of the purchasers. Second, a media voucher object is used to encapsulate the

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information specific to an individual transaction . . . Third, the link between

these data entities is provided by a passport object which encapsulates the

user's personal confidential information, and the encryption keys."

Col. 6, lines 36 -46. Wiser also discloses the "passport is stored on the user's computer

and used during playback to decrypt the media key for each media data file 200

purchased by the user." Col. 8, lines 46-48. And, as Examiner notes, Wiser discloses

"the passport includes confidential personal information of the user, and this deters the

user from freely copying and distributing her passport to others. Col. 8, lines 53-56

Thus, Wiser discloses three distinct data objects used to encapsulate information

used in a transaction. The three data objects are: 1) encrypted media files used to store

media content; 2) a media voucher; and 3) a passport that encapsulates the user's

personal information and the encryption keys to decrypt the encrypted media file. That

is Wiser discloses the use of a passport digital file that enables the user to decrypt a

media file, whereas the purchased media data file 200 is encrypted with the public key

of a user's media player thus binding the media data file 200 to a specific user. *See* Col.

8, lines 48-51.

Fujiwara on the other hand discloses "a merchandise data contents delivery

system." Page 2, paragraph [0031]. Fujiwara also discloses the "personal data of the

requesting user are embedded in the created copy to create the delivery data contents.

The book data contents may be created in PDF format, . . . which is suitable for

electronic delivery, and the user's personal data is embedded in the book data in PDF

format." Page 4, paragraph [0047]]. Fujiwara goes on to disclose that Fig. 8 "shows an

example of formatting instructions for book data contents in which prescribed data

contents have been embedded, . . . in step S105. The personal data of the requesting

user is added to the header file . . . [where the] data in PDF format may be displayed, for

example, through Acrobat software by Adobe Systems." Page 5, paragraph [0049].

Further, Fujiwara discloses "[s]ince the delivery data contents also contain the user's

personal data including security data, the display software also interprets and displays

these added data when displaying the book data contents." Page 5, paragraph [0053].

Thus, Fujiwara discloses a merchandise data contents delivery system that embeds

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personal data of the requesting user in the header of a PDF file which is displayed when the data contents of the file are displayed.

Neither Wiser nor Fujiwara discloses, teaches, or suggests a processor readable medium having a valued content in a digital form, organized to contain: a preexisting digital file having independent value to a provider; and a digital string provided by a purchaser to a provider system of said preexisting digital file, said digital string having a latent value at least to said purchaser, said digital string embedded two or more times in said preexisting digital file by said provider system, to form an embedded digital file, before the valued content is conveyed to said purchaser, wherein said digital string is embedded at least once in a hidden manner forming a hidden digital string." Thus, the combination of Wiser and Fujiwara is silent on "a processor readable medium having a valued content in a digital form, organized to contain: a preexisting digital file having independent value to a provider; and a digital string provided by a purchaser to a provider system of said preexisting digital file, said digital string having a latent value at least to said purchaser, said digital string embedded two or more times in said preexisting digital file by said provider system, to form an embedded digital file, before the valued content is conveyed to said purchaser, wherein said digital string is embedded at least once in a hidden manner forming a hidden digital string." Thus, the Examiner's suggested combination (which may or may not be proper) of Wiser and Fujiwara does not teach the present invention as recited in amended independent claim 1 and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143.

In regards to amended independent claim 15, claim 15 discloses a "digital processor comprising: a processor readable medium having a valued content in a digital form, organized to contain: a preexisting digital file having independent value to a provider; and a digital string provided by a purchaser to a provider system of said preexisting digital file, said digital string encrypted by said provider system and combined with an encrypted provider digital string to form a combined encrypted digital string, said combined encrypted digital string embedded two or more times in said preexisting digital file by said provider system before the valued content is conveyed to

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said purchaser, said digital string having a latent value at least to said purchaser which places said purchaser at increased financial risk when known by another." As noted above neither Wiser nor Fujiwara discloses, teaches, or suggests either embedding a combined encrypted digital string or embedding such a file two or more times in the preexisting digital file. Although Applicants note that it is the combination of all the elements specifically as recited in each claim that determines the allowability over art; Applicants emphasize these two elements solely to emphasize how claim 15 is distinguishable over the prior art.

In regards to amended independent claims 21, 37, and 44 Applicants believe that the combination of all the elements determines allowability over the art; however, again each of these independent claims contains limitations similar to claim 1 that distinguishes these claims over Wiser and Fujiwara. Accordingly, Applicants believe that the Examiner's rejection of claims 1-15, 21-35, and 37-44 has been overcome. Therefore, Applicants respectfully request that the Examiner withdraw the rejection of claims 1-15, 21-35, and 37-44 based on Wiser in view of Fujiwara under 35 U.S.C. §103(a).

In regards to the dependent claims, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. MPEP 2143.03. Dependent claims 2-14, 22-35, 38-43, and 45-46 are dependent upon independent claims 1, 21, 37, and 44 respectively and are therefore believed to be allowable as dependent upon a believed allowable claim. Accordingly, Applicants assert that the rejection of dependent claims 2-14, 22-35, 38-43, and 45-46 has been overcome at least for this reason alone. Therefore, Applicants respectfully request that the Examiner withdraw the rejection of dependent claims 2-14, 22-35, 38-43, and 45-46 based on Wiser in view of Fujiwara under 35 U.S.C. §103(a).

Examiner, on page 12 of the Office Communication has rejected claim 36 under 35 U.S.C. §103(a) as being unpatentable over Dwork et al. (U.S. Patent No. 6,038,316, "Dwork") in view of Fujiwara (U.S. Patent Application Pub. 2001/0054081. This rejection is respectfully traversed with regard to claim 36 since neither Dwork nor

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Fujiwara, taken either individually, or in combination therewith, teach, suggest, or mention the claimed invention.

In regards to amended independent claim 36, claim 36, discloses, a "method for protecting valued content comprising the steps of: electronically acquiring a digital string from a purchaser, said acquired digital string having a latent value at least to said purchaser; embedding said acquired digital string in an encryption key to form an embedded encryption key; embedding said acquired digital string two or more times in a preexisting digital file having independent value to a content owner to form an embedded digital file, wherein said acquired digital string is embedded at least once in a hidden manner forming a hidden digital string; encrypting said embedded digital file to form an encrypted digital file; and conveying said embedded encryption key and said encrypted digital file, as valued content, to said purchaser." In contrast, Dwork discloses "[for] each piece of content the authorization/distribution center wants to distribute, it picks the extrication function embodiment it desires to use, and picks N and K . . . ." Col. 7, lines 30-32. In addition, Dwork discloses a "user . . . then communicates with the authorization/distribution center providing his or her user number n_i, which may be, for example his or her credit card number. Col. 7, lines 38-43. Further Dwork discloses that "the authorization center uses the encryption processing module 22 . . . to perform the authorization function . . . yielding the authorization signal value a_i and combines them to produce a signet pair (a_i, n_i)." Col. 7, lines 53-57. Thus, Dwork discloses a process for distributing content that includes picking an extrication function, obtaining a user number, generating an authorization signal value, and combining the user number and authorization signal value to form a signet pair.

Dwork does not disclose "electronically acquiring a digital string from a purchaser, said acquired digital string having a latent value at least to said purchaser; embedding said acquired digital string in an encryption key to form an embedded encryption key; embedding said acquired digital string two or more times in a preexisting digital file having independent value to a content owner to form an embedded digital file, wherein said acquired digital string is embedded at least once in a

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hidden manner forming a hidden digital string; encrypting said embedded digital file to form an encrypted digital file; and conveying said embedded encryption key and said encrypted digital file, as valued content, to said purchaser." As noted above Fujiwara discloses a merchandise data contents delivery system that embeds personal data of the requesting user in the header of a PDF file which is displayed when the data contents of the file are displayed.

Neither Dwork nor Fujiwara discloses, teaches, or suggests electronically acquiring a digital string from a purchaser, said acquired digital string having a latent value at least to said purchaser; embedding said acquired digital string in an encryption key to form an embedded encryption key; embedding said acquired digital string two or more times in a preexisting digital file having independent value to a content owner to form an embedded digital file, wherein said acquired digital string is embedded at least once in a hidden manner forming a hidden digital string; encrypting said embedded digital file to form an encrypted digital file; and conveying said embedded encryption key and said encrypted digital file, as valued content, to said purchaser." Thus, the combination of Dwork and Fujiwara is silent on a "method for protecting valued content comprising the steps of: electronically acquiring a digital string from a purchaser, said acquired digital string having a latent value at least to said purchaser; embedding said acquired digital string in an encryption key to form an embedded encryption key; embedding said acquired digital string two or more times in a preexisting digital file having independent value to a content owner to form an embedded digital file, wherein said acquired digital string is embedded at least once in a hidden manner forming a hidden digital string; encrypting said embedded digital file to form an encrypted digital file; and conveying said embedded encryption key and said encrypted digital file, as valued content, to said purchaser." Thus, the Examiner's suggested combination (which may or may not be proper) of Dwork and Fujiwara does not disclose, teach, or suggest the present invention as recited in amended independent claim 36 and thus does not meet any of the three basic criteria that must be met to establish a prima facie case of obviousness under MPEP §2143. Accordingly, Applicants believe that the Examiner's rejection of claim 36 has been overcome. Therefore, Applicants respectfully request

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that the Examiner withdraw the rejection of claim 36 based on Dwork in view of Fujiwara under 35 U.S.C. §103(a).

Therefore, in view of the foregoing Amendment and Remarks, Applicants believe the present application to be in a condition suitable for allowance. Examiner is respectfully urged to withdraw the objections and rejections, reconsider the present Application in light of the foregoing Amendment, and pass the amended Application to allowance.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is respectfully requested to call Applicants' representative at (541) 715-1694 to discuss the steps necessary for placing the application in condition for allowance.

Favorable action by the Examiner is solicited.

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Respectfully submitted,
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Amendments to the Drawings

The attached drawing sheet includes changes to Fig. 7.

In Fig. 7, the numeral 768' and its associated lead line has been removed.

The drawing sheet includes all of the figures appearing in the immediate prior version of the sheet in compliance with 37 C.F.R 1.121(b), and includes the wording "Replacement Sheet" in the top margin in compliance with 37 C.F.R 1.121(d).